# A NEW SPECIES OF *POTAMOCYPODA* (CRUSTACEA: BRACHYURA: OCYPODIDAE) FROM MALAYSIA

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Abstract.—Potamocypoda parapugil, the second species of the genus, is described. The new species differs from *P. pugil* in having the chelae equal and similar in both sexes.

The crab characterized below was found in the collections of the Smithsonian by one of us (A.T.) during a visit to the United States in 1982. The holotype and some paratypes are in the collections of the Smithsonian; paratypes also have been deposited in the Institute of Zoology, Academia Sinica, Beijing.

# Potamocypoda parapugil, new species Fig. 1

*Material.*—Kuching, Sarawak, Malaysia [1°33'N, 110°20'E], in ditch by bridge, J. Crane, leg., 8 Aug 1955: male holotype, USNM 137241; 3 male, 6 female, and 1 juvenile paratypes, USNM 195341; 1 male and 1 female paratypes, Academia Sinica.

Description.-Carapace subrectangular, length 0.75 times width in holotype, greatest width at or slightly posterior to midlength. Carapace convex from front to back, almost straight from side to side on anterior half, sloping down to lateral margin on posterior half. Lateral margin a raised, tuberculate ridge lined with setae, forming a curved crest over pterygostomian region, extending posteriorly from outer orbital angle to form anterolateral margin, then sharply turning ventrally toward base of fourth leg, there turning posteriorly to form sinuous posterior margin. Posterolateral part of carapace with carina extending laterally, then curving anteriorly as sharp ridge falling short of lateral margin. Low, transverse carina present on each branchial region above this ridge. Short curved carina extending mesially from point where lateral carina turns ventrally and meets posterolateral carina. Central part of carapace with broad, H-shaped depression. Cardiac and intestinal regions marked on each side by irregular depression ornamented with deep pits. Posterior margin paralleled by transverse ridge on carapace. Front broad, about <sup>1</sup>/<sub>2</sub> carapace width, deflected ventrally, appearing almost straight in dorsal view, with 2 low, short postfrontal ridges, 1 on each side of midline. Front marked with pits and an irregular linear depression. Dorsal surface of carapace smooth medially, pitted laterally, pits increasing in size posterolaterally. Pterygostomian region smooth but covered with short scattered hairs. Interantennular septum very small, inconspicuous. Orbits well formed, orbital margin a raised ridge lined with short setae. Eyes slender, tapering distally, cornea terminal.

Third maxillipeds broad, mouthfield gaping slightly when closed. Ischium and merus very broad, former with oblique hairy ridge across surface. Palp much

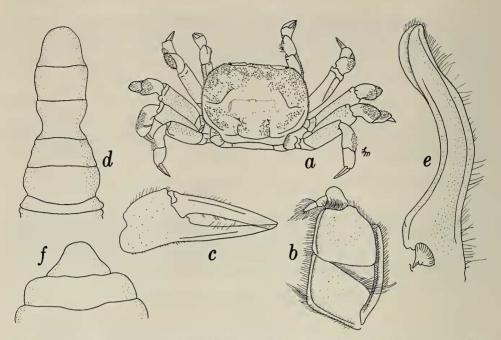


Fig. 1. *Potamocypoda parapugil*: a-e, Male holotype: a, Dorsal view; b, Third maxilliped; c, Chela; d, Abdomen; e, Gonopod. f, Female paratype, terminal two segments of abdomen.

narrower than basal 2 segments, carpus oval with central depression, propodus and dactylus much more slender. Second maxilliped slender, segments longer.

Chelipeds small, slender, equal in both sexes. Fingers almost 2 times as long as palm, longitudinally ridged, gaping, unarmed, tips spatulate. Palm quadrangular, length and depth subequal, surface with few punctations, upper surface with curved ridge. Carpus about twice as long as palm, measured dorsally, with raised inner ridge dorsally. Merus rather stout and short.

Walking legs stout and short, second pair longest, fourth pair shortest. Merus tuberculate dorsally. Carpus longer than propodus, both with dense tomentum dorsally, heavier in males. Dactylus longer than propodus, diamond-shaped in cross-section, with 4 longitudinal ridges, tips corneous, sharp.

Male abdomen with first 2 segments fused, not extending laterally to bases of fifth legs, crossed by sharp ridge. Abdomen constricted between second and third segments and at fifth segment, exposing gonopods, third and fourth segments broader than fifth to seventh segments. Female abdomen broad, but not extending to bases of fifth legs. Gonopod as illustrated, short, not extending to base of sternum of second leg.

*Measurements.*—Male holotype,  $8.0 \times 10.7 \text{ mm}$  (cl × cb); male paratypes ranging from  $5.1 \times 6.4 \text{ mm}$  to  $7.7 \times 10.0 \text{ mm}$ ; female paratypes ranging from  $5.8 \times 7.8 \text{ mm}$  to  $8.1 \times 10.9 \text{ mm}$ ; juvenile  $4.2 \times 5.4 \text{ mm}$ .

*Remarks.*—This new species shares most features with *Potamocypoda pugil*, the only other species in the genus, differing mainly in having the chelae equal and similar in both sexes. It also differs in having a short, curved carina dorsally on each branchial region and in having much stouter walking legs.

Tweedie (1938) erected the genus *Potamocypoda* for a single new species, *P. pugil.* He considered this genus to differ from all other members of the ocypodid subfamily Scopimerinae, except *Pseudogelasimus* Tweedie, 1937, in having the chelipeds strongly unequal in the male. Of the eight scopimerine genera listed by Serène (1968:98, 99), members of all but two, *Potamocypoda* and *Pseudogelasimus*, have equal chelae in the males. In both of these latter genera, each of which contains only one species, the chelae in males are markedly unequal. Species assigned to both members of these genera also lack the tympana on the meri of the walking legs, a characteristic of most of the other species in the subfamily.

We suspect that the new species described herein actually should be assigned to a new genus because of the differences in the chelae. However, until all of the genera of the Scopimerinae can be reviewed, we prefer to assign the species to *Potamocypoda*.

*Etymology.*—The specific name is formed from the Latin, para, meaning near, and the specific name *pugil*, reflecting the similarities of the two species assigned to *Potamocypoda*.

#### Acknowledgments

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## Literature Cited

Serène, R. 1968. Prodromus for a check list of the nonplanctonic marine fauna of South East Asia.— Singapore National Academy of Science, Special Publication 1:1–120.

Tweedie, M. W. F. 1938. A new scopimerine crab from the Malay Peninsula. – Bulletin of the Raffles Museum, Singapore, 14:198–202.

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